



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/GB98/01512 <b>(22) International Filing Date:</b> 26 May 1998 (26.05.98)  <b>(30) Priority Data:</b> 9710809.6                      23 May 1997 (23.05.97)                      GB  <b>(71) Applicant (for all designated States except US):</b> MEDICAL RESEARCH COUNCIL [GB/GB]; 20 Park Crescent, London W1N 4AL (GB).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> CHOO, Yen [GR/GB]; MRC Laboratory of Molecular Biology, Medical Research Council Centre, Hills Road, Cambridge CB2 2QH (GB). KLUG, Aaron [GB/GB]; MRC Laboratory of Molecular Biology, Medical Research Council Centre, Hills Road, Cambridge CB2 2QH (GB). ISALAN, Mark [GB/GB]; 24 Shottfield Avenue, East Sheen, London SW14 8EA (GB).  <b>(74) Agents:</b> MASCHIO, Antonio et al.; D. Young & Co., 21 New Fetter Lane, London EC4A 1DA (GB).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

**(54) Title:** NUCLEIC ACID BINDING PROTEINS**(57) Abstract**

The invention provides a method for preparing a nucleic acid binding protein of the Cys2-His2 zinc finger class capable of binding to a nucleic acid quadruplet in a target nucleic acid sequence, wherein binding to base 4 of the quadruplet by an  $\alpha$ -helical zinc finger nucleic acid binding motif in the protein is determined as follows: if base 4 in the quadruplet is A, then position +6 in the  $\alpha$ -helix is Glu, Asn or Val; if base 4 in the quadruplet is C, then position +6 in the  $\alpha$ -helix is Ser, Thr, Val, Ala, Glu or Asn.

